



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,752	12/27/2001	Jun Sugawara	11728/4	8825
26646	7590	12/29/2004		
KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004			EXAMINER LOPEZ, CARLOS N	
			ART UNIT	PAPER NUMBER
			1731	
DATE MAILED: 12/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N . 10/019,752	Applicant(s) SUGAWARA ET AL.	
	Examiner Carlos Lopez	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-47 is/are pending in the application.
- 4a) Of the above claim(s) 31,33,35,37,40,43 and 44 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30,32,34,36,38,39,46, and 47 is/are allowed.
- 6) ☒ Claim(s) 41,42 and 45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/1/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Newly submitted claims 31,33,35,37,40,43,44 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

As previously noted in the restriction requirement mailed on 10/3/03, this application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Species A: A sintered body with specific properties (i.e. thermal expansion coefficient, modulus of elasticity, and specific rigidity) and method for producing.

Species B: A sintered body with a specific composition and method for producing.

Since applicant has received an action on the merits for the elected species a, claims 31, 33, 35, 37, 40, 43, and 44 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1731

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 41-42 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 403154263A. JP 403150263A teaches the production of a black sintered body by sintering in a hydrogen containing reducing atmosphere at e.g. 1500°C. Note that the terms "low thermal expansion" and "high specific rigidity" are relative terms and do not distinguish over the reference.

Claims 41-42 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 402074538A. JP 402074538A teaches the production of a black sintered body by sintering in a nitrogen containing reducing atmosphere at e.g. 1300°C. Note that the terms "low thermal expansion" and "high specific rigidity" are relative terms and do not distinguish over the reference.

Allowable Subject Matter

Claims 30,32,34,36,38,39,46, and 47 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art fails to disclose or reasonably suggest providing a black low thermal expansion ceramic having the claimed thermal expansion coefficient, modulus of elasticity, and specific rigidity as recited in claims 30, 32, 34, 36, 38, 39. Nor does the cited prior art disclose or reasonably suggest a black low thermal expansion ceramic having the claimed thermal expansion coefficient, modulus of elasticity, and specific rigidity in combination with the claimed ceramic composition as recited in claim 46. No does the cited prior art fail to disclose a method of forming a black low thermal

Art Unit: 1731

expansion ceramic having the claimed thermal expansion coefficient, modulus of elasticity, and specific rigidity in combination with the claimed ceramic composition as recited in claim 47.

Response to Arguments

Applicant's arguments filed 9/30/04 have been fully considered but they are not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the thermal expansion, Young's modulus and the composition of the ceramic) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Cancelled claims 10, 27, and 29 and its corresponding claims 41, 42, and 45 do not recite the argued distinctions in regards to thermal expansion, Young's modulus and the composition of the ceramic.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reference A has been cited to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

Art Unit: 1731

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CL


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700